B.E. (Information Technology) Seventh Semester (C.B.S.)
Data Warehousing & Data Mining

P. Pages :2   **TKN/KS/16/7584**

Time :Three Hours

Max. Marks :80

_____

Notes :   1.   All questions carry marks as indicated.
          2.   Solve Question 1 OR Questions No.2.
          3.   Solve Question 3 OR Questions No.4.
          4.   Solve Question 5 OR Questions No.6.
          5.   Solve Question 7 OR Questions No.8.
          6.   Solve Question 9 OR Questions No.10.
          7.   Solve Question 11 OR Questions No.12.
          8.   Assume suitable data whenever necessary.

1. a) Explain in brief the failure of past decision support system.   **6**

        b) Describe DW Architecture in details.   **8**

                                      OR

2. a) Distinguish between:-   **8**
            i)   Data mart and Data Warehouse.   ii)   Operational and informational system.

        b) Justify, Data warehouse is an Environment, not a product. Give the desired feature of new   **6**
            type of environment.

3. a) What are the challenges in Data preprocessing. Also give various forms of preprocessing?   **6**

        b) What the measures of data dispersion.   **4**

        c) How data cleaning can be handled in preprocessing?   **3**

                                      OR

4. a) Explain Min-max normalization and z-score normalization.   **4**

        b) What are the strategies used in data reduction techniques.   **4**

        c) What is need for multidimensional analysis.   **5**

5. a) Distinguish between OLTP and OLAP.   **6**

        b) Explain star schema. States its advantages and disadvantages.   **7**

                                      OR

6. a) What are different types OLAP models?   **6**

        b) Define Data cube and explain OLAP operations on data cubes.   **7**

7. a) Explain KDD process.   **4**

        b) Discuss various kinds of Data used in data mining.   **6**

        c) Differentiate between clustering and classification.   **4**

                                      OR

8.	a)	Discuss various issues in Data mining.	**4**
	b)	Differentiate between DW and DM.	**4**
	c)	Discuss data mining for the following application domain. i) Financial data analysis. ii) Retail Industry.	**6**
9.	a)	Write the steps Involved in APRIORI algorithm and explain it.	**7**
	b)	What is the procedure to generate association rules from frequent item set?	**6**

<div align="center">

OR

</div>

10.		Write a short note on:-	
	a)	Constrained based mining.	**5**
	b)	Steps to improve efficiency of APRIORI algorithm.	**5**
	c)	Advantages and dis advantages of FP-growth tree.	**3**
11.	a)	Define Big data. States its challenges.	**5**
	b)	Describe the architectural component of Hadoop ecosystem.	**8**

<div align="center">

OR

</div>

12.	a)	Discuss Business intelligence application used in Logistics and production domain.	**9**
	b)	Write a note on BI framework 2020.	**4**

<div align="center">

****

</div>